Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-46 (Canceled).

Claim 47 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide having an amino acid sequence encoded by a nucleic acid of SEQ ID NO: 8,~~SEQ ID NO. 8, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 48 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide having the amino acid sequence of SEQ ID NO: 9,~~SEQ ID NO. 9, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 49 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide having an amino acid sequence encoded by a nucleic acid of SEQ ID NO: 2,~~SEQ ID NO. 2, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 50 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-

length recombinant human arginase I polypeptide having the amino acid sequence of SEQ ID NO: 3,~~SEQ ID NO. 3, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 51 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry having an amino acid sequence encoded by a nucleic acid of SEQ ID NO: 8,~~SEQ ID NO. 8, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 52 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry, having the amino acid sequence of SEQ ID NO: 9,~~SEQ ID NO. 9 which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 53 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry having an amino acid sequence encoded by a nucleic acid of SEQ ID NO: 2,~~SEQ ID NO. 2, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-

length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 54 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry having the amino acid sequence of SEQ ID NO: 3, ~~SEQ ID NO. 2, which~~ wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.

Claim 55 (Currently Amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering parenterally to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide comprising the amino acid sequence of SEQ ID NO: 3~~SEQ ID NO. 3~~ which is of 80-100% purity, wherein said human arginase I is covalently linked to at least one polyethylene glycol (PEG) molecule, and has an extended half-life of at least 3 days.

Claim 56 (Previously presented): The method of claim 55, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μM for at least 3 days.